

Sixth National Conference on Biological Control: Innovative Approaches for Green India

3 - 5 March 2021

ICAR-NBAIR, Bengaluru



*Society for Biocontrol Advancement &
ICAR-National Bureau of Agricultural Insect Resources*

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Cover page: 1. NPV infected fall armyworm larva, 2. parasitized fall armyworm eggs, 3. *Trichogramma chilonis*, 4. *Chelonus* sp. larva, 5. fall armyworm larva; **Photo credits:** Photographs 1- Dr G. Sivakumar; 2, 3 and 5 – Dr Omprakash Navik; 4 – Dr A.N. Shylesha. Cover Page designed by Dr G. Mahendiran.

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Preface

Biological control of crop pests and diseases is the perfect option to conserve our rich biodiversity. Besides, conservation biological control has provided solutions to several of our pest problems. One of the classic example being that of the bio suppression of the Papaya mealy bugs through conservation of the indigenous biological control agents. Biological control through production and augmentation of macrobials (predators and parasitoids) is now accepted as an alternative, economic and environmentally sound pest management strategy to address ill effects caused by excessive use and misuse of chemicals.

Microbial bioagents including entomopathogenic bacteria, fungi, virus, and nematodes have offered realistic alternatives to chemical pesticides when used as a part of an ecologically based integrated pest management or area wide pest management strategies. Several innovations have been made across the globe on characterization, survival, mass production and delivering microbial biocontrol agents for the management of pests. The slow spread of awareness on biological control, in under developed and developing countries, is primarily due to lack of knowledge of the biological control systems . Biocontrol researchers and practitioners face several challenges like a) Development of Suitable formulations of biopesticides; b) Implementation of International collaborative projects for the management of invasive species; c) Timely availability of quality bioagents; d) Prediction of field performance of biological control agents; e) Registration of biopesticides; f) Commercialization production of macrobials; g) Formulation of biointensive pest management programs incorporating biocontrol techniques with other compatible strategies which are acceptable to farmers.

The need of the hour is to have a system in place for smooth transition of biocontrol technologies from the laboratory to the field, for which public private partnerships is crucial .There is also need to take government bodies on board to provide not only monetary support but also for framing biocontrol-friendly public policies. This will definitely lead to a change in outlook making biological control a primary pest control method in agriculture rather than an alternative means.

The aim of 6th NCBC 2021 is to address the issues faced by researchers, commercial entrepreneurs, farmers and policy makers, with reference to adoption of biological control approaches in the context of biodiversity, increased chemical pesticide pressure and climate change. The conference would include a lead paper presentation, oral presentations and poster sessions. This 6th NCBC is being organized by ICAR-NBAIR and the Society for Biocontrol Advancement. The 6th NCBC 2021 organizing committee acknowledges the important contribution and whole- hearted support received from our co-organisers, sponsors and all the delegates. A WARM WELCOME TO THE BEAUTIFUL CITY OF BENGALURU, INDIA.

Organizing committee, 6th NCBC 2021